

## ENVIRONMENTAL REVIEW CHECKLIST/ ENVIRONMENTAL MITIGATION AND MONITORING PLAN (ERC/EMMP)

for renovating a processing facility

## **Royal Nuts Ltd**

Implemented under: the USAID Agriculture Program

IEE DCN: 2018-GEO-008

Prepared by: Nino Inasaridze, Environmental Manager, the USAID Agriculture Program

## ENVIRONMENTAL REVIEW CHECKLIST FOR IDENTIFYING POTENTIAL ENVIRONMENTAL IMPACTS OF PROJECT ACTIVITIES AND PROCESSES

The Environmental Review Checklist (ERC) and Environmental Mitigation and Monitoring Plan (EMMP) is intended for use by implementing partners to:

- assess activity-specific baseline conditions, including applicable environmental requirements;
- identify potential adverse environmental effects associated with planned activities; and
- develop EMMPs that can effectively avoid or adequately minimize the identified effects.

If implementing partners are in doubt about whether a planned activity requires preparation of an ERC, they should contact their Contracting Officer's Representative (COR)/Agreement Officer's Representative (AOR) for clarification. In turn, the COR/AOR should contact their Mission Environmental Officer (MEO) if they have any questions. In special circumstances and with approval of the BEO it is possible to have one very comprehensive ERC/EMMP for multiple sub-activities if they are similar in scope. (When preparing the ERC/EMMP, please indicate "not applicable" for items that have no bearing on the activity.) The ERC/EMMP should be completed by an environmental specialist. The ERC/EMMP must be completed and approved prior to the activity beginning.)

#### 1. Activity and Site Information

Project Name: (as stated in the IEE)	The USAID Agriculture Program	
Mission/Country:	Georgia	
DCN of Original IEE:	2018-GEO-008	
DCNs of IEE Amendments	MTF 2021-GEO-002	
Activity/Site/Grantee Name:	Establishment of hazelnut processing facility, village Nosiri, Senaki municipality, Samegrelo-Zemo Svaneti region	
Type of Activity:	Hazelnut processing	
Implementing Partner:	CNFA	
Name and Organization of Preparer:	Nino Inasaridze, the USAID Agriculture Program	
Date Prepared:	April 13, 2022	

#### 2. Activity Description

#### 2.1. Activity purpose

The purpose of this project is to renovate an existing hazelnut processing facility in village Nosiri, Senaki municipality, Samegrelo-Zemo Svaneti region. The grantee will use USAID funds to procure and install a color sorter and a metal detector. In addition, Royal Nuts Ltd will provide co-funding to renovate the facility, construct a 40 m² warehouse and procure hazelnut peeling and drying/roasting equipment, hazelnut grinding machine and vibration bunkers, elevators and loading chambers.

## 2.2. Total funding in USD

The total funding of this project is \$185,700, from which the USAID Agriculture Program will provide a \$50,200 in-kind grant.

2.3. Direct Beneficiaries, e.g., size of community, number of school children, etc.

Direct beneficiaries include the founder of Royal Nuts Ltd, five new permanent employees of the company, and 15 new seasonal workers. The company will also directly benefit around 150 small and medium farmers, by purchasing hazelnuts and offering hazelnut processing services.

#### 2.4. Number of existing employees and annual revenue, if this is a business

The proposed project will facilitate creation of five new full-time and 15 new seasonal jobs, including two full-time and 10 seasonal jobs for women. The company will also offer paid internship opportunities to at least one student per year. Interns will gain practical experience in hazelnut processing operations and new agricultural technologies.

### 2.5. Implementation timeframe and schedule

Period	Milestones
Stage II Period: April – June 2022 USAID Funds: \$50,200	<ol> <li>Procurement and installation of color sorter.</li> <li>Procurement and installation of metal detector.</li> </ol>

#### 2.6. Detailed description of activity

2.6.1. Steps that will be taken to accomplish the activity, including mobilization, site preparation, site restoration, and demobilization, if applicable;

Grant applicant plans to renovate a 655 m² processing facility. The facility is a single-story building a slab-on-grade foundation and a metal roof. The renovation will be followed by the procurement and installation of a color sorter and metal detector with the USAID grant, and the procurement of hazelnut peeling and drying/roasting equipment, a hazelnut grinding machine and vibration bunkers, elevators and loading chambers using grantee funds. The water for the processing facility will be provided through the already installed local water supply system connected to the existing water well located on site. The local sewage system for the operating facility is arranged including underground septic tank, which is constructed using hydrophobic materials to minimize the risk of water and soil pollution. The septic tank will be regularly cleaned by a municipally owned service company. The grantee will use USAID funds to procure and install a color sorter and a metal detector. In addition, Royal Nuts Ltd will provide co-funding to renovate the facility, construct a 40 m² warehouse and procure hazelnut peeling and drying/roasting equipment, hazelnut grinding machine and vibration bunkers, elevators and loading chambers.

### 2.6.2. Items that will be purchased (This section should fully describe what funds are being used for.)

Item Description	Quantity	Cost (USAID Funds)	Cost (Grantee Funds)
Color sorter  This machine is used to sort hazelnuts by color and size (see image below; section 2.9).	1	\$45,000	0
Metal detector  Metal detector is used to detect different metals (copper, lead, aluminum, tin, stainless steel) which can be accidentally mixed into raw materials (see image below; section 2.9).	1	\$30,000	0

2.6.3. What entity will be responsible for the maintenance or sustainability of the activity after completion or handover?

After completion of project the grant applicant is responsible for the maintenance and sustainability of the activity.

- 2.7. Location of activity, e.g. name of village or town, street address, province *Village Nosiri, Senaki municipality, Samegrelo-Zemo Svaneti region*.
- 2.8. Detailed description of site
- 2.8.1. Existing setting, e.g., urban, village, agricultural, or undisturbed land *The site is surrounded by agricultural lands owned by grant applicant and neighbor famers.* 
  - 2.8.2. Size of the facility or hectares of land

Site map, e.g., provide an image from Google Earth (or similar) of the project site (include latitude and longitude coordinates).

The grant applicant will renovate a 655  $m^2$  hazelnut processing facility and construct a 40  $m^2$  warehouse on the 2,027  $m^2$  land. Please find below an image from Google Earth.



Royal Nuts Ltd, village Nosiri, Senaki municipality, Samegrelo-Zemo Svaneti region

2.9. Photos of site, items to be purchased, engineering construction plans (when available)



Royal Nuts Ltd, village Nosiri, Senaki municipality, Samegrelo-Zemo Svaneti region



Color sorter



Metal detector

#### 3. Activity-Specific Baseline Environmental Conditions

#### 3.1. Population characteristics

The proposed site belongs to Senaki municipality, Samegrelo-Zemo Svaneti region of Georgia with a total area of 520.7 km<sup>2</sup>. The population of the Senaki municipality is estimated to be 34,000 people. The main agricultural activities of the region are wine production, fruit and vegetable growing, and animal farming.

#### 3.2. Geography

The designated site represents a flat area with no visual signs of possible landslides, floods, or erosion. There are no monuments or other objects of cultural heritage or historical importance near the site.

#### 3.3. Climate

This part of western Georgia is characterized by an average annual rainfall of about 1,620 mm and average annual air temperature of  $+13.8^{\circ}$ C.

#### 3.4. Natural resources, e.g., nearby forest/protected areas, ground and surface water resources

The depth of groundwater at the site is 25 meters. There are no protected areas nearby. The river Tekhuri flows 1.7 km to the east.

#### 3.5. Current land use and owner of land

The land is owned by the grant applicant. The preparatory works for renovating the processing facility are ongoing.

## 3.6. Other relevant description of current environmental conditions in proximity to the activity

N/A

### 4. Legal, Regulatory, and Permitting Requirements

- 4.1. Does this activity require an EIA under a national law? *No*.
- 4.2. Applicable National or local permits for this activity, responsible party, and schedule for obtaining them:

Permit Type	Responsible party	Schedule
Zoning		
Building/Construction		N/A
Source Material Extraction		
Waste Disposal		
Wastewater		
Storm Water Management		
Air Quality		
Water Use	Grantee	Already obtained
Historical or Cultural Preservation		
Wetlands or Water bodies		
Threatened or Endangered Species		
Electricity	Grantee	Already obtained

4.3. Will the activity be required to adhere to formal engineering designs/plans?

If yes, attach the designs or plans to this ERC/EMMP. Yes, the plan is designed an incorporated above.

4.3.1. Have the designs or plans been or will they be developed by a qualified engineer? *The designs are developed by a qualified engineer and approved by local authorities (see above).* 

For Sections 5 through 12, please fill out the blank column with either "Yes," "No" or "Maybe. Provide a discussion for any of the listed issues that are "Yes" or "Maybe" answers and likely to have a bearing on this activity.

## 5. Land use changes and land impacts

5.1.	Will the activity change the land use, e.g., undeveloped, agricultural, residential, commercial, or industrial?	No
5.2.	Will the activity require temporary or permanent property land taking?	No
5.3.	Will the activity involve site preparation, e.g., clearing and grubbing, grading?	Yes
The m	inimum cleaning and grading is needed for renovation activities.	
5.4.	Will the activity involve onsite excavation or trenching?	Yes
	The minor excavation is needed for renovation of the processing facility and for connection to the septic tank – about 3 $m^3$ soil was excavated and distributed around the site and surrounding green areas.	
5.5.	Will the activity involve the use of borrow pits or quarries? If so, describe the siting, operation, and closure plans.	No
5.6.	Will the activity interfere with or connect to existing aboveground or below-ground utilities, e.g., electricity, communications, water, sewer, or natural gas?	No
5.7.	Will the activity involve installation of new aboveground or below-ground utilities, e.g., electricity, communications, water, sewer, or natural gas?	No
5.8.	Will the activity result in mineral extraction, e.g., aggregate, stone, or coal?	No
5.9.	Will the activity result in hydrocarbon extraction, e.g., oil, or natural gas?	No
5.10.	Are there known geological hazards, e.g., faults, landslides, or unstable soils which could affect the activity? If yes, how will the project ensure structural integrity?	No

#### 6. Impacts to forestry, biodiversity, protected areas, and endangered species

		1 1
6.1.	Is the site located adjacent to or near a protected area, national park, nature preserve, or wildlife refuge?	No
6.2.	Is the site located in or near threatened or endangered (T&E) species habitat?	No
	6.2.1. If yes, describe the plan for identifying T&E species during activity implementation. (Non-yes/no question)	N/A
	6.2.2. If yes, describe the formal process for halting work, avoiding impacts, and notifying authorities if T&E species are identified during implementation.	N/A
6.3.	Is the site located in a migratory bird flight or other animal migratory pathway?	No
6.4.	Will the activity involve harvesting of non-timber forest products, e.g., mushrooms, medicinal and aromatic plants (MAPs), herbs, or woody debris?	No
6.5.	Will the activity involve tree removal or logging?	No
6.6.	Will activities result in increased outdoor noise on a continuous or frequent basis at sound levels that disturb wildlife?	No

## 7. Water and water quality impacts

7.1.	List any National, European Union, or other international water discharge regulations or standards applicable to this activity. (Non-yes/no question)	
Protec	f Georgia on Public Health, Republic of Georgia, Law of Georgia on Environmental tion, Law of Georgia on the State Ecological Expertise, Law of Georgia on Biological Agrocing, Law of Georgia on Water	
7.2.	How far is the site located from the nearest river, stream, or lake? (Non-yes/no question)	
The riv	ver Narekavi flows 1.6 km to the north-east and the Mukhranmsheni channel flows 1.8 km to tth.	
7.3.	Is the site located in a floodplain?	No
7.4.	Will the activity increase the risk of flooding at the site or on other property?	No
7.5.	Will the activity disturb wetland, lacustrine, or riparian areas?	No
7.6.	Will the site require excavation within, placing of fill in, or substrate removal (e.g., gravel) from a river, stream, or lake?	No
7.7.	What is the depth to groundwater at the site? (Non-yes/no question)	
The de	pth of the groundwater at the site is 70 meters.	
7.8.	Will the activity cause interference with the current drainage systems or conditions?	No
7.9.	Will the activity result in new or increased ground or surface water extraction? If yes, describe the expected volumes and the permit requirements.	No
7.10.	Will the activity discharge domestic or industrial sewage to surface water, groundwater, or a publicly owned treatment facility?	No
7.11.	Will the activity change storm water runoff volume, intensity, or locations? If so, describe how the designs/plans effectively and comprehensively address the management of storm water runoff and its effects.	No
7.12.	Is there potential for discharge of potentially contaminated (including suspended solids) runoff?	No
7.13.	Will the activity result in the runoff of pesticides, fertilizers, or toxic chemicals into surface water or groundwater?	No
7.14.	Will the activity involve the use or onsite storage of liquid fuels? If yes, describe the fuel type(s), quantities, storage conditions, and spill control procedures.	No
7.15.	Will the activity result in discharge of effluent containing livestock wastes such as manure or blood?	No

## 8. Atmospheric and air quality impacts

8.1.	List any National, European Union, or other international air emission regulations or standards applicable to this activity.	
Law o	f Georgia on Environmental protection.	
8.2.	Will the activity result in increased emission of air pollutants from a vent or as fugitive releases, e.g., soot, sulfur dioxide, oxides of nitrogen, volatile organic compounds, or methane?	No
8.3.	Will the activity involve burning of fossil fuels?	No
8.4.	Will the activity involve burning of wood or biomass?	No

8.5.	Will the activity install, operate, maintain, or decommission systems containing ozone depleting substances, e.g., freon or other refrigerants?	No
8.6.	Will the activity generate an increase in carbon emissions?	Yes
There	will be minor increase during the renovation period.	
8.7.	Will the activity increase odor on a continuous or frequent basis?	No
8.8.	Will the activity generate dust on a continuous or frequent basis?	Yes
There	will be minor increase during the renovation period.	
8.9.	Will the activity increase the risk of fire, explosion, or hazardous airborne chemical releases?	No

9. Energy efficiency, pollution prevention, and cleaner production

9.1.	Does the activity use renewable energy sources? If yes, describe the energy sources.	No	
9.2.	Does the activity require use of energy efficiency equipment? If yes, describe the energy efficiency requirement.	No	
9.3.	Does the activity promote pollution prevention and cleaner production measures? If yes, describe the measures.	Yes	
The de	The design of the building includes installation of water, heating, ventilation and sewage systems.		
9.4.	Does the activity promote maximum reliance on green building or green land-use approaches? If yes, describe the approaches.	Yes	
Green land-use approach will be applied by introducing stormwater management as it is described in the EMMP.			

## 10. Waste management

10.1.	List any National, European Union, or other international solid waste disposal or storage	
	regulations or standards applicable to this activity. (Non-yes/no question)	
Waste	management code.	
10.2.	List any National, European Union, or other international hazardous waste disposal or storage regulations or standards applicable to this activity. (Non-yes/no question)	
Not ap	plicable.	
10.3.	Describe the local capabilities and facilities for solid, hazardous, and recyclable wastes. (Non-yes/no question)	
Not ap	Not applicable.	
10.4.	Will the activity generate nonhazardous solid wastes such as construction debris, packaging material, or nontoxic byproducts? If yes, describe expected types and quantities of solid waste and the plans for reuse, recycling, and disposal.	Yes
The construction waste (concrete, sand, gravel) will be stored on site separately and later will be disposed by local company in accordance with national law. Unused or damaged plastic boxes, as well as remains of sandwich panels, will be collected, stored separately on-site in a designated area. This material will be collected by recycling company.		
10.5.	Will the activity involve the generation and disposal of hazardous waste, such as solvents, acids, caustics, toxics, or other chemicals? If yes, describe the plans for disposal of these	No

10.6.	Will the activity involve lead paint or lead-painted building components? If yes, describe the plans for disposal of lead paint containers or lead-painted debris.	No
10.7.	Will the activity involve the installation, use, or removal of asbestos-containing materials or building materials that may contain asbestos? If yes, describe the plans for disposal of waste asbestos containing materials.	No
10.8.	Will the activity involve disposal or retrofitting of equipment containing polychlorinated biphenyls (PCB), e.g., electrical transformers or fluorescent light ballasts? If yes, describe the plans for disposal of PCB materials.	No
10.9.	Will the activity generate any other solid or hazardous wastes requiring specific recycling or waste management plans, such as batteries, fluorescent tubes, aerosol cans, or electronic wastes? If yes, describe the plans for disposal of these materials.	No

## 11. Pesticide Health, and Safety Impacts

11.1.	Will the activity involve use or onsite storage of pesticides?	No
	11.1.1. If yes, identify the applicable PERSUAP, including DCN and expiration date. (Non-yes/no question)	
	11.1.2. If yes, describe the types and quantities of pesticides.	
	11.1.3. If yes, describe the pesticide storage conditions.	
	11.1.4. If yes, describe the worker training requirements.	
	11.1.5. If yes, describe the personal protective equipment (PPE) to be worn workers.	
	11.1.6. If yes, describe public safety precautions.	
11.2.	Will chemicals be used or stored at the site? If yes, describe the chemicals, quantities, and storage conditions.	No
11.3.	Will the activity potentially disturb soil contaminated with toxic or hazardous materials?	No

#### 12. Social and cultural impacts

12.1. List any National, European Union, or other international historical or cultural preservation regulations or standards applicable to this activity.					
Not applicable.					
12.2.	Will activities result in light pollution, which could adversely affect the natural environment?	No			
12.3.	Are there cultural or historic sites located at or near the site?	No			
	12.3.1. If yes, provide a map showing the locations relative to the site.				
	12.3.2. If yes, indicate the distance between the activity site and each cultural or historic site.				
	12.3.3. If yes, describe the plan for avoiding disturbance or notifying authorities.				
12.4.	Are there unique ethnic or traditional cultures or values present at or associated with the site? If yes, what is the applicable preservation plan?	No			

# 13. Further Analysis of Recommended Actions (Most activities will have a threshold determinations of negative determination with conditions..

13.1.	☐ Categorical Exclusion: The activity is not likely to have an effect on the natural or physical
	environment. No further environmental review is required.* (This is rarely used in the ERC/EMMP.)

13.2.	Negative Determination with Conditions: The activity does not have potentially significant adverse
	environmental, health, or safety effects, but may contribute to minor impacts that can be eliminated or
	adequately minimized by appropriate mitigation measures. ERC/EMMPs shall be developed, approved
	by the Mission Environmental Officer (MEO) and the BEO prior to beginning the activity, incorporated
	into workplans, and then implemented. For activities related to the procurement, use, or training related
	to pesticides, a PERSUAP will be prepared for BEO approval, PERSUAPS are considered amendments
	to the IEE and usually Negative Determination with Conditions. See Sections H and I below.*
13.3.	Positive Determination: The activity has potentially significant adverse environmental effects and
	requires further analysis of alternatives, solicitation of stakeholder input, and incorporation of
	environmental considerations into activity design. A Scoping Statement (SS) must be prepared and be
	submitted to the BEO for approval. Following BEO approval of the SS an Environmental Assessment
	(EA) will be conducted. The activity may not be implemented until the BEO clears the final EA. If the
	Parent IEE does not have Positive Determination as one of the threshold determinations, the IEE needs to
	be amended.
13.4.	Activity Cancellation: The activity poses significant and unmitigable adverse environmental effects.
	Adequate ERC/EMMPs cannot be developed to eliminate these effects and alternatives are not feasible.
	The project is not recommended for funding.

\*Note regarding applicability related to Pesticides (216.2(e): The exemptions of §216.2(b)(l) and the categorical exclusions of §216.2(c)(2) *such as technical assistance*, *education*, *and training* are not applicable to assistance for the procurement or use of pesticides.

#### 14. EMMPs and ROCs

- 14.1. Activity-specific environmental mitigation and monitoring plan (EMMP): Using the table provided below, list the processes that comprise the activity, then for each process, identify impacts requiring further consideration. For each impact, describe the mitigation and monitoring measures that will be implemented to avoid or to adequately minimize the impacts. All questions in Sections 5 through 12 with Yes or Maybe answers should be addressed. Upon request, the MEO may be able to provide your project with example EMMPs that are specific to your activity.
- 14.2. Annually (or more frequently if required by the Activity Manager/AOR /COR) and at the closeout of the activity, the IP shall prepare a Record of Compliance (ROC) to be submitted to the Activity Manager/AOR/COR. The ROC shall document how the mitigation and monitoring requirements were met. As appropriate, attachments such as site photos, permits, verification of local inspections, product warranties, etc. should be included in the ROC. The ROC shall be posted to the USAID Environmental Compliance Database (ECD).

Process	Identified Environmental Impacts	Mitigation Measures	Monitoring Indicators	Monitoring and Reporting Frequency	Responsible Parties	Records Generated
1.Planning and De						
1.1. Design the equipment procuremen t plans	Equipment can have potential impacts on land, water, air, and human health.	Equipment procurement plans include environmental considerations. Proper equipment and appropriate technology should be used to minimize the environmental impact.	Documented procurement plan as part of application and grant agreement (if awarded). Equipment selection criteria include the environmental aspects.	During the application review and full proposal design process.  Before the grant awarding.	AP Environmental Specialist, AP Technical Evaluation Committee.  Grant applicant is responsible for implementation of mitigation measures.	
1.2. Selection of Equipment maintenanc e and storage area/siting	Not adequately selected site can cause the negative impacts: - ground water quality; - surface water quality; - geological structural instability; - habitat and wetland alteration; - tree cutting and habitat degradation; - disturbance of contaminated soil; - disturbance of residential areas; schools, hospitals; - disturbance of cultural resources; - disruption of gas or electric utilities.	<ul> <li>Avoid siting in areas with shallow groundwater table or porous soils.</li> <li>Avoid siting in an area that has known flooding potential. Locate more than 30 meters from a water body to minimize risk from contaminated storm water.</li> <li>Ensure proper grading of the site in accordance with formally defined elevations resulted in proper drainage of stormwater and rainwater.</li> <li>Ensure that the roof gutters are installed properly, directing the stormwater away from the walls and basement, so that it flows to a vegetated area.</li> <li>Plant trees around the facility onsite.</li> <li>Site the building so the sun will not have major increases of temperature in the building and add longer eaves for the building to reduce sun exposure in the summer and to have the strength to add solar panels in the future to reduce energy costs.</li> <li>Avoid areas prone to landslide or in known fault areas.</li> <li>Avoid siting in critical habitat areas or wetlands.</li> <li>Location of buildings where least disturbance of resources required.</li> </ul>	- Documented site visit memo of Initial Environmental screening Visual inspection of site and its surroundings to identify soil structure and potential of landslides, erosion, or flooding In case of any sign of flooding or geological instability found during the visual inspection:  a) additional hydro geological expertise is required; b) gathering some statistics by interviewing local population and/or obtaining official, reliable information, when available Visual inspection of site and its surroundings to identify critical points Revision and inspection of planning documents,	During the application eligibility revision process Initial Environmental Screening;  Before the applications are chosen for further consideration.	AP Environmental Specialist, Field Coordinators, M&E Specialist, AP Technical Evaluation Committee.  Grant applicant is responsible for implementation of mitigation measures.	

2.Mobilization and	1 Sourcing	<ul> <li>Avoid sites that have known hazardous waste contamination or ensure plan for remediating waste.</li> <li>Avoid siting within 100 meters of occupied residential areas and within 1 km of operating schools and hospitals.</li> <li>Area with buildings should be located at least 9 m from overhead powerlines.</li> <li>Avoid disturbing or damaging cultural resources. Obtain appropriate permit.</li> <li>Identify underground and overhead utility structures and avoid interference with them.</li> <li>Consider the location of the doors and windows to ensure cross ventilation.</li> <li>Envisage an emergency exit in case of large storms.</li> </ul>	construction or any other permits.			
2.1. Identification of equipment and mother plant suppliers	Supplied equipment and mother plants can have potential impacts on land, water, air, and human health.	- Select suppliers with proven experiences to provide high-quality environmentally sound service responsible for recycling of used materials etc.	- Evaluate the experience /reputation of suppliers Review the technical characteristics of the equipment suggested by suppliers Documented procurement plan Vendor selection criteria include responsibility to take back recyclable materials.	Before equipment and mother plants are chosen by grant applicant.	AP Financial Manager, Environmental Specialist.	
2.2. Site clearing and preparation	<ul> <li>Site clearance waste.</li> <li>Dust emissions.</li> <li>Temporary drainage impairment.</li> <li>Noise and traffic nuisance.</li> <li>Soil compaction and contamination.</li> <li>Vegetation loss.</li> </ul>	<ul> <li>Design and implement mobilization plans that optimize avoidance of environmental impact.</li> <li>Use designated landfill site for material disposal.</li> <li>Implement measures to minimize drainage impacts.</li> <li>Clearly delineate boundaries and minimize staging area footprints.</li> <li>Minimize disturbance of native flora during construction.</li> </ul>	<ul> <li>Conformance with mobilization plan.</li> <li>Shipping manifests, landfill receipts.</li> <li>Photo logs; number of documented actions.</li> <li>Placement of signs and perimeter markings.</li> <li>Vegetation surveys.</li> <li>Visual inspection of site.</li> </ul>	At the start of the activity and at least monthly thereafter.	AP Environmental Specialist, Field Coordinators, M&E Specialist.  Grant applicant is responsible for implementation of mitigation measures	

		<ul> <li>Minimize the amount of clearing, clear small areas for active work one at a time.</li> <li>Use soil, small stones, gravel and rock, as well as excess soil on site, or landfill them together with tree roots and vegetation.</li> <li>Clean the area from the excavated natural material (soil) and place/use it (distribute) on the existing fields.</li> <li>Dispose the excess construction material (concrete) accordingly on the designated by municipality area.</li> <li>Where possible, remove large plants and turf without destroying them, and preserve them for replanting in temporary nurseries.</li> <li>Move earth and remove vegetation only during dry periods.</li> <li>Store topsoil for re-spreading. If vegetation must be removed during wet periods, disturb ground only just before actual construction.</li> <li>Grade the area so stormwater drains to a vegetated area so it infiltrates into the ground.</li> <li>Install temporary erosion control features when permanent ones will be delayed. Use erosion control measures such as hay bales, berms, straw, or fabric barriers.</li> <li>Design the condensate lines so the</li> </ul>				
		*				
2.3. Construction	<ul> <li>Odor and particular matter emissions.</li> <li>Siltation and scouring from storm water discharge.</li> <li>Occupational safety mishaps.</li> <li>Public safety risks.</li> <li>Alternation of drainage leading to soil erosion, water quality degradation, altered hydrology, and damage</li> </ul>	- Implement plans and schedule work during appropriate times and weather conditions - Establish and follow the worker safety measures, including application of PPE during the construction works, availability of first aid kits, etc Establish worker safety training programs, such as proper use of material/machinery as well as safe resolution to emergency situations, including fire, storm, etc.	<ul> <li>Site inspections to revise conformance with construction plans, traffic management, and storm water management plans.</li> <li>Percentage of workers and supervisors with up-to-date training records.</li> <li>Photo logs.</li> <li>Conformance with drainage design.</li> </ul>	After significant rain events, or at least, monthly.	AP Environmental Specialist, Field Coordinators, M&E Specialist.  Grant applicant is responsible for implementation of mitigation measures.	

	to valuable ecosystems and habitats.  - Traffic congestion.  - Improper waste management.	<ul> <li>Use Best Management practices for transportation and storage of materials and equipment.</li> <li>Use water sprinklers when necessary to reduce dust;</li> <li>Control access to work zones.</li> <li>Plan and implement proper storm water BMPs, including worker trainings.</li> <li>Protect area next to trenching activities.</li> <li>Use construction lines to mark construction/installation zone.</li> <li>Minimize removal of tree/brush cutting unless they are invasive or weedy.</li> <li>Provide dust control during transportation of construction materials.</li> <li>Instruct workers to protect surrounding environment.</li> <li>Materials stored onsite, protected from storm water runoff or wind until transport for spreading or beneficial use/disposal.</li> <li>Minimize use of heavy machinery.</li> <li>Dispose in landfill if no alternate use available.</li> </ul>	-	Monitor waste quantity (kg (m³)).  Monitor amounts of waste raised during the transportation of construction materials.  Complaints from nearby farmers or residents.  Visual inspection of works.			
3.1 Transport, Operation, Maintenance and Disposal of equipment	- Operation and maintenance - Operation and maintenance of equipment may cause worker safety problems Worker safety and public health physical hazards - various accidents caused by non-proper maintenance of equipment Exposure to high noise levels from machinery Transportation resulting in delayed or damaged machinery Public safety risks Traffic congestion.	Installation and testing to ensure safety operation, the qualified supplier with proven experience will be selected responsible for installing, testing, and service of the equipment, as well as for training of grantee's staff on Q&M. The respective manuals should be delivered and available in Georgian language;  Day-to-day maintenance and repair activities to keep equipment safe and reliable; using qualified technicians to avoid or minimize worker safety risks.  Establish and maintain and effective waste management, disposal, and waste reduction system. Ensure that it includes used or excess supplies/consumables, used light bulbs, office waste etc. This will include organic waste management: the poor-quality	-	Documented testing results. Documented safety regulations and operational guidelines. Documented Equipment Safety checklist. Documented waste management plan. Percentage of trained workers. Number of conducted trainings. Inspection of protective equipment available.	At project initiation, at least quarterly during operation.	AP Environmental Specialist, Field Coordinators, M&E Specialist.  Grant applicant is responsible for implementation of mitigation measures.	

fruits of pressed/shredded apples wil	1 -	Inspection of medical,		
be collected separately and used fo		chemical protection		
composting. Remaining part of organi		and first aid kits.		
waste will be distributed to neighboring		Inspection of fire		
farmers as livestock feed.		protection equipment.		
	_	Inspection of		
Worker Safety Measures		ventilation system.		
- Establish and maintain	ı -	Number of accidents		
documented safety procedures and	l	and injuries (workers,		
ensure workers/equipment user		visitors, farmers,		
understand and follow safet		children, pedestrians).		
instructions supplied on produc		Inspection of		
labels and or described in		equipment.		
appropriate guidelines.	_	Interviewing the		
- Establish and maintain worke	r	workers.		
safety training programs, such a		Review of types of		
proper use of equipment as well a	s	waste (solid, liquid)		
safe resolution to emergency	7	and waste quantity.		
situations, including fire, storm		Existence of separate		
etc.		containers for solid,		
- Use appropriate persona	1	liquid and hazardous		
protective equipment;		waste.		
- All users of the equipment should	i -	Availability of waste		
undergo adequate training in saf		disposal service		
operation, correct use, risks an		company and/or		
precautions.		recyclers.		
- All users of th	-	Storage inspections.		
machinery/equipment give	ı -	Inspection of		
adequate training in saf	•	machinery.		
operation, correct use, risks, and	1 -	Delivery documents		
precautions.		signed by project		
- Make available, where necessary	,	beneficiary.		
medical and physical protection		Inspected when		
and first aid kits.		received to ensure		
- Establish and maintain a fir	,	correct materials		
control system and fire-fighting	ŗ	received and		
equipment, including smok		undamaged.		
detectors and fire extinguisher.		_		
- Properly maintain ventilation	ı			
systems to control dust in the	,			
workplace.				
- Control access to operation sit	,			
and maintenance areas and clearly				
display signs to enhanc				
avoidance of hazards.				
- Check technical conditions of th				
transport and relevan	t			
transport and relevant	-			

documentation

	-	Use Best Management Practices		
		for load/reload of equipment;		
		Experienced/trained driver and		
		workers to transport and		
		load/reload equipment.		
	-	Preliminary established hours and		
		routes of transportation to		
		minimize traffic disruption.		
	-	Protect equipment from rain and		
		wind while transporting.		

### Certification of No Adverse or Significant Effects on the Environment

I, the undersigned, certify that activity-specific baseline conditions and applicable environmental requirements have been properly assessed; that environmental impacts and pesticide-related health and safety impacts requiring further consideration have been comprehensively identified; and that adverse impacts will be effectively avoided or sufficiently minimized by proper implementation of the EMMP(s). If new impacts requiring further consideration are identified or new mitigation measures are needed, I will be responsible for notifying the USAID COR/AOR, as soon as practicable. Upon completion of activities, I will submit a *Record of Compliance with Activity-Specific EMMPs* using a format approved by the MEO.

Louisa Namicheishvili DN: cn=Louisa Namicheishvili, o=CNFA, ou, email=Inamicheishvili@apg eorgia.org, c=GE Date: 2022.05.18 11:38:17	
Name Implementer Project Director/COP: Louisa Namicheishvili	Date
Implementer Project Director/COF. Louisa Namichershviu	
Approvals:	
SIOBHAN Digitally signed by SIOBHAN	
KATHRYN PANGERL Date: 2022.05.18 08:47:21	
PANGERL +04'00'	
Name	Date
Gocha Lobzhanidze  Gocha Lobzhanidze  Digitally signed by Gocha Lobzhanidze Date: 2022.05.23 15:02:09 +04'00'	
Name	Date
Mission Environmental Officer: Gocha Lobzhanidze	
Concurrence:	
Not required per MTF DCN 2020-GEO-015	
	Date

#### **Distribution:**

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## RECORD OF COMPLIANCE WITH ACTIVITY-SPECIFIC ENVIRONMENTAL MITIGATION AND MONITORING PLANS (EMMPs)

Subject:	Site or Activity Name/Primary Project
IEE DCN:	
ERC/EMMP DCN:	
To:	COR/AOR/Activity Manager Name
Copy:	Mission Environmental Officer Name
Date:	

The [name of the implementing organization] has finalized its activities at the [site name] to [describe activities and processes that were undertaken]. This memorandum is to certify that our organization has met all conditions of the EMMPs for this activity. A summary and photo evidence of how the mitigation and monitoring requirements were met is provided below.

1. Mobilization and Site Preparation	
2. Activity Implementation Phase	
3. Site Closure Phase	
4. Activity Handover	
Sincerely,	
Implementer Project Director/COP Name  Approved:	Date
USAID/COR/AOR/Activity Manager Name	Date

#### **Distribution:**

- Project Files
- MEO
- Bureau Environmental Officer